1 VQE results Aer Estimator (No Shots)

(Full Hamiltonian) Double Well $\Lambda = 32$ COYBLA Max 10K Iterations

Ansatz	Tolerance	Converged runs	Mean iter	VQE min E.	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e−01	100/100	102	1.3895e+00	4.979e−01	4.2672e+00	3.3755e+00	8.9163237056e−01	00h 00m 36s
RA r1 rl	1e−02	100/100	469	9.1659e−01	2.4956e−02	1.0899e+00	1.9827e−01	-	00h 02m 56s
RA r1 rl	1e−03	100/100	1992	8.9462e−01	2.9837e−03	9.1682e−01	2.5191e−02	-	00h 11m 13s
RA r1 rl	1e−04	91/100	5030	8.9344e−01	1.8079e−03	8.9386e−01	2.2276e−03	-	00h 24m 40s
RA r1 rl	1e−05	65/100	6644	8.937e−01	2.067e−03	8.937e−01	2.0681e−03	-	00h 32m 39s
RA r1 rl	1e−06	30/100	7012	8.937e−01	2.0668e−03	8.937e−01	2.0668e−03	-	00h 37m 56s
RA r1 rl	1e−07	15/100	8186	8.937e−01	2.0668e−03	8.937e−01	2.0668e−03	-	00h 41m 05s
RA r1 rl	1e−08	20/100	8812	8.937e−01	2.0668e−03	9.1479e−01	2.3156e−02	-	00h 40m 50s
Ansatz	Tolerance	Converged runs	Mean iter	VQE min E.	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1